

REMARKS

The Examiner's Action mailed on August 6, 2008, has been received and its contents carefully considered. Additionally attached to this Amendment is a Request for Continued Examination (RCE).

In this Amendment, Applicant has amended claims 1, 8, 14 and 21, canceled claim 19, and added claims 22 and 23. Claims 1 and 21 are the independent claims. Claims 1-18 and 21-23 are pending in the application. For at least the following reasons, it is submitted that this application is in condition for allowance.

The Examiner's Action has rejected claims 1-9, 13-18 and 21 as being anticipated by *Shimizu et al.* (USP 6,838,844) (hereafter simply *Shimizu*). It is submitted that these claims are not anticipated by *Shimizu* for at least the following reasons.

Independent claim 1 is directed to an electric power steering device that includes, *inter alia*, a rotation angle detecting means and a rotor co-rotatable with a rotation shaft. The rotation angle detecting means includes a stationary portion and a movable portion. The rotor includes a rotor body, and a rotor magnet attached to the rotor body in a co-rotatable manner. The rotor body includes an outer tubular portion, a shaft portion and a cover. Claim 1 further recites that the rotor magnet is fixed to the outer tubular portion, the shaft portion is provided coaxially with the outer tubular portion and retains the movable portion of the rotation angle detecting means, and the connection portion connects the outer tubular portion and the shaft portion.

Claim 1 has been amended to recite that the speed reduction mechanism includes an input shaft, and that the input shaft and the rotational shaft are formed in one piece from a single

member and jointly form a unitary shaft. As shown by way example in Applicant's Figure 1, the input shaft 12 of the speed reduction mechanism 9 and the rotational shaft 8 of the electric motor 7 is formed in one piece from a single member and jointly form a unitary shaft 15 (see also the specification, paragraph [0014]).

Claim 1 has been further amended to recite that the shaft portion has a concave portion, and an end of the unitary shaft is fitted in the concave portion. As shown by way example in Applicant's Figure 2, the shaft portion 51 has a concave portion 70 and an end of the unitary shaft 15 is fitted in the concave portion 70 (see also the specification, paragraph [0031]).

These features of the invention are not disclosed or suggested by the cited reference.

Shimizu is directed to an electric power steering apparatus which includes, *inter alia*, a shaft 48, a rotating shaft 51, a rotor 52, a stator 54, and a rotation angle detector 23 (see *Shimizu*, col. 6, line 29, col. 7, lines 62-65, Figure 4).

The Examiner equates the element 51 disclosed by *Shimizu* with the claimed rotor body. The Examiner further equates a proximal end (that retains the element 23) of *Shimizu*'s element 51 with the shaft portion of the rotor body recited in claim 1, and equates *Shimizu*'s shaft 48 with the rotational shaft recited in claim 1.

However, a proximal end of *Shimizu*'s element 51 does not have any concave portion for fitting an end of the shaft 48 therein, as would be required by amended claim 1. As shown in *Shimizu*'s Figure 4, the proximal end of *Shimizu*'s element 51 does not have any concave portion.

In addition, *Shimizu*'s shaft 48 is directly connected with the output shaft 19a (i.e., a fore-end of the element 51). In other words, as shown in *Shimizu*'s Figure 4, the proximal end (that retains the element 23) of *Shimizu*'s element 51 is disposed at an end of the element 51 opposite to the output shaft 19a of the element 51 that is connected with an end of the shaft 48. Thus, an end of the shaft 48 can not be fitted in the proximal end (that retains the element 23) of *Shimizu*'s element 51.

Further, *Shimizu*'s element 51 described as a **rotating shaft**. Because the element 51 is a rotating shaft, the element 51 is rotatably supported by a pair of ball bearings 55 and 56 (see col. 7, lines 65-66), and is connected with the power transmission shaft 48 via the torque limiter 57 (see Figure 4), which increases the number of parts (i.e., bearings 55 and 56 and torque limiter 57) and the number of manufacturing process.

In contrast, the claimed element, which the Examiner asserts as being equated with *Shimizu*'s element 51, is a rotor body, rather than a rotating shaft. A radial run out during rotation of the rotor may be decreased. Thus, there is no need to provide a bearing for supporting such a rotor body (e.g., a rotor end 51b of the rotor body 31 as shown in Applicant's Figure 2) opposite to the speed reduction mechanism 9. Further, the claimed rotor body is connected with another shaft simply through a concave portion of the rotor body, rather than via any torque limiter.

Accordingly, *Shimizu* does not disclose or suggest the rotor body, as recited in claim 1. It is thus submitted that claim 1 is *prima facie* patentably distinguishable over the cited reference. Accordingly, it is requested that the rejection be withdrawn, and claim 1 be allowed.

Because claims 2-9 and 13-18 depend from independent claim 1, it is submitted that these claims are *prima facie* patentably distinguishable over the cited reference for at least the same reason as claim 1, as well as for additional features recited therein. It is thus requested that the rejections be withdrawn, and claims 2-9 and 13-18 be allowed.

Independent claim 21 has been also amended to recite the rotor body as is identically recited in amended claim 1. It is thus submitted that claim 21 is *prima facie* patentably distinguishable over the cited reference for at least the same reason as claim 1, as well as for additional features recited therein. Accordingly, it is requested that claim 21 be allowed.

The Examiner's Action has further rejected claims 10-12 as being obvious over *Shimizu* in view of *Cheng* (USP 6,164,407). Because claims 10-12 depend from independent claim 1, and because *Cheng* does not overcome the above-noted deficiencies of *Shimizu*, it is submitted that claims 10-12 are *prima facie* patentably distinguishable over the cited references for at least the same reason as claim 1, as well as for additional features recited therein. Accordingly, it is requested that the rejections be withdrawn, and claims 10-12 be allowed.

New claims 22 and 23 have been added, which is supported by the specification, at paragraph [0031]. Because these claims depend from independent claims 1 and 21 respectively, claims 22 and 23 are *prima facie* patentably distinguishable over the cited references for at least the same reason as claims 1 and 21, as well as for additional features recited therein.

It is submitted that this application is in condition for allowance. Such action and the passing of this case to issue are requested.

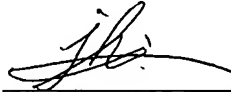
Should the Examiner feel that a conference would help to expedite the prosecution of the application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

An RCE fee (\$810) and an excess claim fee (\$52 for one claim in excess of 20) are submitted herewith. Should any additional fees be required, however, the Commissioner is hereby authorized to charge such fees to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,

November 4, 2008

Date



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